RESTRECTED DATA

HISTORY OF THE STRATEGIC ARMS COMPETITION 1945 -1972

PART II

ERNEST R. MAY JOHN D. STEINBRUNER THOMAS W. WOLFE

> ALFRED GOLDBERG EDITOR

OFFICE OF THE SECRETARY OF DEFENSE HISTORICAL OFFICE MARCH 1981

RESTRICTED DATA

TOP CROKES

Force Size as a Political Reaction

Under this conception of the Soviet decision process, it is a reasonable expectation that major procurement decisions which determine the size of strategic force deployments would be subject to broad political influences and that, as occurred in the United States, a coherent calculus relating force size to clear strategic objectives would tend to follow rather than precede the pertinent decisions. In retrospect, this does appear to have happened in the Soviet Union.

The pace and scale of Soviet ICBM and SLBM deployments do appear to have been driven by political reactions to the U.S. strategic program in the context of the major confrontations between the two powers in the early 1960s. It is a reasonable inference from evidence that Khrushchev made a major internal political commitment in 1958 in effecting a substantial cut in a previous plan for ICBM deployment. The 7-year plan promulgated

IGP SECRET

in 1958 clearly made provision for a substantial deployment of medium-and intermediate-range (SS-4s and SS-5s) missiles to the European and Far East theaters, but despite some strong technical similarities in the systems involved (the SS-5 and SS-7), ICBM deployment was severely restricted and delayed. This political position was undermined by the U-2 incident in 1960, the Berlin crisis in 1961, and the Cuban crisis in 1962. Khrushchev was forced into a series of ad hoc adjustments to the intercontinental-range forces—off of the normal planning cycle. In the next formal plan, formulated and adopted in 1965, Khrushchev's successors programmed a strategic force apparently designed to match U.S. strategic deployments in overall force size and basic technical composition. By 1965, these questions appear to have been decided at the authoritative political level, though technical implementation was just beginning.

This political posture attributed to Khrushchev accounts in a straightforward way for the otherwise puzzling delay in ICBM deployment at a time when Soviet booster technology (specifically the SS-6) was being successfully demonstrated in the space program, when a major commitment to missile systems was being made in the extensive SS-4 and SS-5 deployments, and when the U.S. was undertaking crash efforts on behalf of the early ATLAS, TITAN, POLARIS, and MINUTEMAN programs. The argument also accounts for the gross disparity between the scale of deployment and its technical characteristics, since the assertion is that the Soviets simply deployed what was available at those points at which crisis events produced political shifts among the leadership.

TOP SEGRET

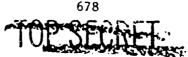
The analysis can be pursued, however, beyond such arguments of general plausibility. It is possible to relate the observations of major changes in strategic deployment activities enumerated above to significant political events--notably meetings of the Communist Party Presidium, plenary sessions of the Central Committee, and Party Congresses which brought about publicly apparent changes in policy and changes in the status of major political figures. The correlation between these different sets of events is close enough over an extended period of time to imply clearly that the political fortunes of Khrushchev and other major figures in the leadership were deeply affected by their position on strategic deployment questions, and that the U-2 incident, the Berlin crisis in 1961, and the Cuban missile crisis all had strong effects on the developing Soviet force posture. Some details of these events, which were not much more than isolated facts at the time, assume far greater significance in light of the actual evolution of Soviet forces in the late 1960s and early 1970s.

Khrushchev established his basic political position in working out the 7-year plan in 1958 and in adjusting the strategic deployment program undertaken in 1962. At both points some very sharp decisions were made. The cessation in 1958 of early construction activities at a number of sites presumably associated with the missile program indicates that the 7-year plan formalized a reduction in the number of ICBM installations previously anticipated by the defense industry. During 1960 and 1961 construction started at an additional set of sites, only to be stopped again by the decisions of 1962. If one assumes that the first ICBM complex started, the 25-launch site complex at Yurya for the SS-7, was

indicative of the current plan, then the original deployment program before the cuts in 1962 must have been on the order of 600-700 missiles.* If the evidence from construction activities is fully credited, Khrushchev cut this program nearly in half by mid-1962--obviously a major political commitment.

The available evidence will not sustain detailed reconstruction of domestic political calculations which Khrushchev might have made, but it is worth noting that the deployment pattern which he apparently intended to bring about implies a plausible strategic policy. If, as/Ulam argues, West Germany and China were seen as the most serious, long-term political/ military threat to the Soviet Union, then dominance in the European and Far Eastern theaters was the primary strategic requirement. extensive deployment of SS-4s and SS-5s in the 7-year plan, together with the larger medium-range bomber program previously established, would provide some approximation of military superiority in these peripheral theaters. Simultaneous restraint in building intercontinental-range forces would be consistent with a long-term desire to see the more distant, politically less threatening, but militarily and economically more powerful United States gradually disengaged. This latter logic would

^{*}Including all of the sites for which there is some evidence of association with the SS-6, SS-7, and SS-8 programs, there would have been complexes without the cutbacks. At 25 missiles per site this would yield a program of TCBMs planned by mid-1962, proceeding at a construction rate which would have provided an operational force of this size within a 2-to 3-year period. The 1958 decisions reallocated the SS-6 to the space program/ sustained a large production run. The 1962 decisions cn sustained a large production run. The 1962 decision cancelled the SS-8 program entirely, including, as far as can be judged, production beyond that required for the limited deployment allowed to proceed to completión. The SS-7 program was expanded in increments during the 1960-62 period and finally curtailed in late 1963.

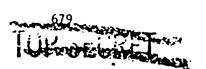


TOPSELEET

be encouraged by the serious question of resource constraints. Most recent estimates of Soviet military budgets of the period indicate that they were roughly double what U.S. analysts then estimated them to be; moreover, the Soviet military sector was not (as then supposed in the United States) substantially more efficient than the civilian sector. Khrushchev's strong political commitment at the inception of the 7-year plan to increased agricultural production provided a strong incentive to adopt a strategic policy focused primarily on the peripheral theaters and dedicated to strategic restraint and political detente with the United States.

Since Khrushchev's diplomatic behavior, as documented in previous chapters, obviously did not express such sentiment, this analysis must assume the presence of strong political opposition to Khrushchev's defense policy within the Soviet leadership. The coincidence of crisis events, political shifts, and major strategic deployment decisions noted above provides circumstantial evidence that internal opposition did exist, that it was strong enough to force Khrushchev's aggressive behavior in Berlin and Cuba as a defensive reaction, and that the resulting strategic program was the net result of Khrushchev's unsuccessful efforts to preserve his strategic posture against proponents of larger forces directed against the United States.

^{*}Though the strategic programs were probably not large enough to have a major effect on the economy simply by virtue of their total cost, they did require substantial allocations of critical assets—e.g., concrete, chemicals, automotive machinery, and skilled construction workers.



According to some informed accounts. Khrushchev lost political initiative with the U-2 incident, and there is ample reason to accept that view. The U-2 affair threatened the position he was attempting to define--both his force programming commitments and the diplomatic posture he set at the Camp David meeting with Eisenhower in September 1959. Political consequences were immediately drawn. On 4 May 1960--3 days after the U-2 was brought down--a number of important personnel changes were effected at a plenary session of the Communist Party Central Committee. * F.R. Kozlov was brought into the Party Secretariat, A.I. Kirichenko (a major Khrushchev ally) was demoted, and L.I. Brezhnev (then a Khrushchev protege) was eased out in a two-stage process. 13 Two deputies of D. Ustinov (then head of the armaments industry)--V.N. Novikov and K.M. Gerasimov--were made respectively Chairman of the USSR Gosplan and Chairman of the RSFSR Gosplan--critical positions in the state planning apparatus.

Kozlov (who at least subsequently had political ties with Ustinov) quickly moved to challenge Khrushchev's authority within the Party Secretariat, and Gosplan frustrated Khrushchev's attempts to reallocate investment from heavy industry to agricultural machinery. During late

^{*}It is interesting and probably significant that Khrushchev in the early days of the U-2 crisis gave it rather modest import and quickly suggested that President Eisenhower could not have known of the flight. He did not make a strong statement on the issue until after both/Dulles and Eisenhower had publicly stated their personal responsibility. Though conventional accounts attribute Khrushchev's early position to tactical maneuvering to trap the Americans into making dramatically refutable explanations, it is also quite possible--and under this line of reasoning very plausible-that Khrushchev was cffering a formula for quiet resolution or at least containment of the affair. If so, Eisenhower's public statement eliminated that possibility.

1960 and early 1961 a substantial increment was added to the ICBM

deployment plan. Moreover, during May and June 1960 Anastas Mikoyan, spirit closely associated with Khrushchev in the Camp David meeting and in the/
the Presidium member most of detente which surrounded it, disappeared

from activities of the Party leadership in an exercise of political
retribution which struck indirectly at Khrushchev himself.

If the U-2 affair was an embarrassment which gave both legitimacy and political position to opponents of Khrushchev's defense posture, the Berlin crisis in 1961 was a major defeat with observable consequences in the strategic program. Khrushchev had to retreat from his virtual ultimatum and his intemperately proclaimed public commitment in the face of a newly clarified strategic situation—the United States enjoyed an obvious and increasing advantage in intercontinental—range strategic forces, an advantage to which the Kennedy administration was apparently willing to appeal over Berlin. By a coincidence of timing, moreover, the retreat had to come in a particularly difficult internal political context—the 22nd Party Congress in the fall of 1961—which brought

^{*}As noted in Chapter XI, the Kennedy administration did undertake discussions in 1961 of a special plan--separate from SIOP 62--for using nuclear weapons against the Soviet Union in response to military action in Berlin and did get far enough to identify conceptually an attack plan considered plausible. This, and the development of an accurate intelligence assessment over the summer of 1961--showing a substantial United States advantage -- created the conditions for serious political use of a strategic threat. The communication of such a threat to the Soviet Union was done with diplomatic delicacy and does not appear to have been formulated by Kennedy in anything more than very general terms. Accepting that there were inadvertent means of communication and that both because of his own political situation and because of the strategic position of the Soviet Union Khrushchev appears to have been extraordinarily sensitive, it is quite likely that a stark threat was perceived in Moscow. In retrospect, one can identify a number of ways in which such a threat was communicated.(cont'd)



- 1) On 25 July 1961 Kennedy gave a speech on the Berlin crisis in which he invoked the strategic strength of the United States directly and stated a strong political rationale for using it should the situation require it. In relating the most fundamental political principles to the Berlin confrontation and urging grim resolve on the American people—even to the point of dwelling at some length on the necessity of constructing fallout shelters—Kennedy was clearly warning that the crisis could develop into full strategic nuclear confrontation. In September, Georgi Bolshikov, editor of the magazine USSR, and Mikhail Khalarmov, chief of the Soviet press office, told Pierre Salinger, Kennedy's press secretary, that Krushchev was under great pressure to settle the Berlin question and that the 25 July speech, understood as an ultimatum, had greatly upset him. (Memorandum to the President by Pierre Salinger 24 Sep 61.)
- 2) Through agents who had access to deliberations of the Berlin task force, the Soviets learned that the allies were planning to send an armed column down the Autobohn in the event of obstructions on the Berlin access routes and that they would be instructed to fight if opposed even though the task force knew the columns would be defeated. The clear implication of this inadvertent message was that larger forces would then have been evoked—i.e., deliberate escalation.
- 3) In September 1961 Khrushchev took the initiative to set up a special channel of communications to discuss the Berlin situation without informing the respective foreign offices. (Special arrangements for communications between the Heads of State had also been used in April on the occasion of the Bay of Pigs crisis but had to be reactivated for Berlin). After attempting without satisfaction to use C.L. Sulzberger for such purposes, Khrushchev on 29 September 1961 wrote Kennedy a long personal letter from his vacation villa on the Black Sea urging a settlement of the crisis via the medium of these personal letters. Kennedy's reply was not sent until 16 October 1961-when the President was also at his vacation home.on Cape Cod. As a result of the delay, Kennedy's letter reached Khrushchev apparently on the day before the 22nd Party Congress opened. It was moderate in tone but contained some phrases that would have been highly provocative to his politically pressured reader: "It is not the remains of World War II (apparently referring to Khrushchev's main justification for a Peace Treaty) but rather the threat of World War III that concerns us all." "The alternatives /to a settlement are so dire..." Given the delay, the timing of its arrival, the phrases it contained, and the fact that it used the special channel to state an uncompromising political position, Kennedy's letter may well have been interpreted as confirmation that the basic U.S. position was to hold firm against accommodation in Berlin on the basis of strategic superiority. Khrushchev's reply on 9 November 1961 hints that such was the case. It was tougher in tone despite the fact that it confirmed his abandonment of the December deadline for agreement, and it contained an interesting phrase: "I have no ground to retreat further. There is a precipice behind." (The letters containing these phrases are from the Pen Pal Exchanges, held at the State Department and the Kennedy Library).

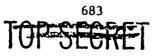
further consolidation of Kozlov's administrative influence and an unfavorable test of strength for Khrushchev before the assembled party cadres.* The consequences became apparent the following spring when the 1962 strategic force reprogramming decisions were made.

On 5 March 1962 at the opening of a special plenary session of the Central Committee on Agriculture, Khrushchev in the name of the Party Presidium outlined a program for increased production of agricultural machinery in service of better agricultural performance—his major political commitment. Four days later at the close of the session he sharply reversed his emphasis and warned:

The officials in charge of agriculture ... must understand that the measures envisaged for strengthening agriculture do not mean that we shall immediately divert funds away from industry and the reinforcement of the country's defence. 14

This highly unusual shift in position was followed by a number of signs in April that major adjustments to the defense program were under way--press articles proclaiming the primacy of heavy industry and defense (principles Khrushchev had explicitly amended in promulgating the Seven-Year Plan); announcement of a 20-to-30 percent increase the in meat and dairy prices; cancellation of a plan to eliminate/income

^{*}Khrushchev launched a surprising and intense revitalization of his de-Stalinization campaign at the 22nd Party Congress (after conceding most of his Berlin position in his opening speech). The campaign was almost certainly directed at his rivals who quickly contained it, with minimal result (the removal of Stalin from his mausoleum). To the cadres schooled in the subtleties of Party politics it is likely that the affair served as a measure of power and sent a message indicating Khrushchev's diminished authority. By early 1962 there were subtle signs in the Soviet press of Khrushchev's reduced prestige and a resurgence of the military. A number of Kozlov's former associates were promoted within the Party and the economic administration, and one of them, I.A. Grishmanov, became head of Gostsroy, the building industry, replacing a personal friend of Khrushchev's. See Tatu, p.137.



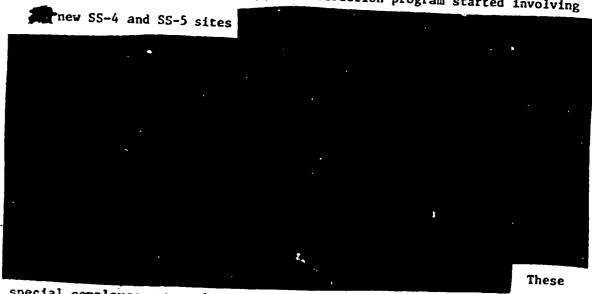
tax (with which Khrushchev had been closely associated); and the replacement of the commander of the Strategic Rocket Forces,

K.S. Moskalenko. Though it requires some speculation, it does appear that the sequence of decisions in March and April 1962 involved a major struggle between Khrushchev and his Presidium colleagues over defense policy, and that the puzzling elements of the resulting program came about because neither side could exercise full political authority.

If one assumes that Khrushchev, under sharp political challenge in the spring of 1962, was attempting to reassert his authority and still preserve his basic position on defense policy (the one objective probably requiring the other by that time) then a reasonably consistent pattern can be constructed from the activities which followed. Under the political circumstances, his obvious need would be to provide an immediately credible military response to the U.S. strategic forces stationed outside of the peripheral theaters, but without simply acceding to the large strategic forces deployment plan he had been resisting. It is quite possible that he sought to do this by adopting the strong theory of strategic warfare outlined above, namely, defense against the U.S. strategic forces by preemptive attack directed at the command and control systems. This would not require full matching of the large U.S. program; it could well prevent the worst case-- a fully coordinated first-strike by the entire U.S. force structure--and it would give some chance of decisive success, however small, should war be forced on an unwilling Soviet Union as it had been in the past. The Cuban deployment was of the appropriate size to cover SAC bases on the first volley, and of the two targets definitely identified, one was a SAC base. Though there were obvious

and major benefits to the fact that missiles fired from Cuba would give very little warning, it was nonetheless true that U.S. bombers could be dispersed and that the actual operational plan for bomber attack was heavily dependent on staging bases in the peripheral theaters which were already covered by Soviet forces. What could not readily move and was not in the theaters was the SAC command structure. Targeting the command structure would help explain why the Soviets would undertake the very risky Cuban deployment at the same time they were halting construction work on a number of SS-8 sites. If simple numbers of strategic missiles had been the issue, it would have been both faster and safer to finish the ICBM sites already under construction, perhaps on an accelerated schedule.

Command structure targeting derives further substance from the fact that in 1962, in addition to the adjustments in the Soviet missile deployments described previously, a construction program started involving



special complexes, started in 1962, were quickly completed by the end of the year but were then abandoned by the end of 1963 when the SS-11

TOPSECRET

TO State Sta

and SS-9 deployment was begun. The critical question of their firing orientation is uncertain, but technically plausible assumptions can be adopted to produce a consistent interpretation for all 9 sites; namely, that they were intended to cover prominent sea approaches (and hence the most plausible POLARIS flight corridors) with missiles capable of propagating EMP effects. The shortlived and peculiar character of this program, and its disappearance with the obvious force reprogramming which occurred after the Cuban missile crisis, could be interpreted as further evidence that Khrushchev in extremis in 1962 did adopt the anticommand/control strategy, which provided the underlying purpose of the force adjustments undertaken during the year.

As this scenario is then played out, the outcome of the Cuban crisis—another major blow to Khrushchev's position—provided his opponents with the means both of forcing an accelerated increase in the ICBM and SLBM deployment and of removing Khrushchev from the leadership. At an enlarged Presidium meeting in February 1963, with Kozlov leading a majority opposition, Khrushchev was forced into reversals of policy on de-Stalinization, on China, and on detente. At a Presidium meeting in March 1963, Ustinov was appointed First Deputy Prime Minister and installed as head of a newly created central planning unit (Supreme Sovnarkhoz), clearly designed to reverse Khrushchev's provious defense policy at the same time. Objective evidence indicates that the major addition to the strategic force deployment entailed in the acceleration of the SS-11 program

686

third quarter of 1963, and it is a fair presumption to trace it back to these personnel changes made in March.

The natural progress of events, one may infer, was interrupted by Kozlov's stroke in April 1963, which removed the key figure opposing and probably affected the schedule to replace Khrushchev. The political disruption caused by Kozlov's illness gave Khrushchev a reprieve and may well be the basic reason why the deployment of the SS-11 force clearly occurred in two separate phases. However, it was Brezhnev, with longstanding ties to the critical defense industry center at the who eventually became Khrushchev's successor, more as a beneficiary of the opposition than as prime mover. ** Afterward, during the preparation of a new 5-year plan in 1965, the second half of the SS-11 deployment was added to the force structure.

*It is possible to speculate that there were political connections during this period between major Party leaders and certain missile system design bureaus and that these associations influenced the course of events.



**Tatu, op cit, pp. 399ff, traces details of Khrushchev's removal in October of 1964 which suggest that Brezhnev was certainly not the sole actor and probably not the dominant one.

FOP SECRE

If this interpretation of the sequence of decisions which provided for the main body of the Soviet strategic forces is accurate in general, a number of implications can be drawn regarding the character of the program. First, if Khrushchev did indeed stake his internal political position on a relatively / intercontinental-range deployment and on a strategy of disengaging the United States from the peripheral theaters, then it is unlikely that his opponents in urging larger forces went beyond arguments for parity with the United States. It would not be necessary to do so in order to define a clear alternative position, and aspirants to broad political power would have a strong incentive not to decide the underlying tradeoffs between resources to the civilian and military sectors more starkly than circumstances required. Moreover, whatever Kozlov had in mind, the ultimate successor, Brezhnev, was a moderate figure in the debate, as far as can be judged. He had close ties to Khrushchev early in his career and distanced himself from Khrushchev's position gradually.

Second, it is likely that the political succession in 1964 and the debate surrounding the Five-Year Plan in 1965 brought a resolution to the basic question of force size which was stable to a first approximation. Kosygin, identified with the cause of greater investment in the consumer economy throughout the events described and installed as head of the government under the collective leadership arrangement, continued to argue this position during the early part of 1965. Though he clearly had to accede to the additional increment in strategic forces and the resource flow required, his continuation in office attests to the importance of the position he represented.

Supporting these assertions is the fact that no new complexes have been added to the Soviet land-based forces that cannot be readily associated with decisions reached in 1965 or before. Though the main bulk of Soviet deployment actually occurred after 1965, it did so within the basic structure of installations established. Adjustments to the ICBM forces after that date all either obviously or plausibly have been planned as replacements for previously deployed forces.*

Finally, it seems likely, particularly in the light of evidence from subsequent generation weapons noted below, that the increase in strategic forces effected against Khrushchev's resistance was simply grafted onto the deployed force structure without any elaborate or precise interpretation of its strategic significance. During the period of struggle, the eventual victors appear to have been more in the position of opposing, resisting, criticizing high level policy than formulating it. It seems very likely that the central focus on peripheral theaters carried through the increases in intercontinental-range forces. Though the matter is inherently more obscure, it is at least quite plausible that a focus on command/control targets in dealing with the U.S. strategic forces carried through as well. Traces of both themes are present in subsequent strategic force activities.

^{*}Because submarines are not deployed in complexes, this argument cannot be extended to SLBM deployments, and it is therefore less clear that SLBM force levels were also set in 1965. The construction facilities for the submarine force were substantially in place by that date, however.

